

Please add the following claims:

58. A communications device for communicating data via a power line, comprising:

a filter in communication with the power line, wherein said filter substantially prohibits a flow of data signals through the power line; and

a transformer having a first winding with a first end and a second end, wherein said first end of said first winding of said transformer is electrically coupled to the power line on a first side of said filter, and wherein said second end of said first winding of said transformer is electrically coupled to the power line on another side of said filter.

59. The device of claim 58, wherein said first end of the first winding is electrically coupled to the power line via a capacitor.

60. The device of claim 58, wherein said filter is toroidal in shape and disposed around at least a portion of the circumference of the power line.

61. The device of claim 58, wherein said first end and said second end of said first winding are electrically coupled to the power line via a first and second capacitor, respectively.

62. The device of claim 58, wherein said transformer includes a second winding electrically coupled to transmit circuitry.

63. The device of claim 62, wherein said transmit circuitry includes an amplifier and a modulator.

64. The device of claim 58, wherein said transformer includes a second winding electrically coupled to receive circuitry.

65. The device of claim 64, wherein said receive circuitry includes an amplifier, a filter, and a demodulator.

66. The device of claim 58, wherein said transformer includes a second winding electrically coupled to a transceiver.

67. The device of claim 66, wherein said transceiver is a fiber optic transceiver.

68. The device of claim 66, wherein said transceiver is a wireless transceiver.

69. The device of claim 66, wherein said transceiver is a coaxial cable transceiver.

70. The device of claim 58, wherein the power line carries at least one thousand volts.

71. The device of claim 58, further comprising a power supply receiving power from the power line.

72. The device of claim 71, further comprising a toroidal shaped power supply inductor disposed around at least a portion of the circumference of the power line and electrically coupled to said power supply.

73. The device of claim 58, further comprising a toroidal shaped power supply inductor disposed around at least a portion of the circumference of the power line.

74. The device of claim 58, wherein said transformer further comprises a second winding, and further comprising a first modem in communication with said second winding.

75. The device of claim 74, further comprising a router in communication with said first modem.

76. The device of claim 74, further comprising a second modem in communication with said first modem.

77. The device of claim 58, wherein said filter comprises at least one toroidal magnetically permeable core disposed around the power line.

78. The device of claim 77, wherein said core is comprised of a first portion and a second portion.

79. The device of claim 78, wherein said first portion and said second portion of said core are held in spaced relation to each other, at least in part, with a hinge.

80. A communications device for communicating data via a power line, comprising:

a low pass filter coupled to the power line;

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a transformer having a first winding and a second winding, wherein said first winding has a first end electrically coupled to the power line on a first side of said low pass filter, and wherein said first winding has a second end electrically coupled to the power line on a second side of said low pass filter; and

a transceiver coupled to said second winding of said transformer.

81. The device of claim 80, wherein said transceiver is a fiber optic transceiver.

82. The device of claim 80, wherein said transceiver is a wireless transceiver.

83. The device of claim 82, wherein said transceiver is configured to communicate in accordance with an IEEE 802.11 standard.

84. The device of claim 80, wherein the transceiver is a coaxial cable transceiver.

85. The device of claim 80, wherein said second winding of said transformer is coupled to said transceiver through a filter and an amplifier.

86. The device of claim 80, further comprising a first modem in communication with said transceiver.

87. The device of claim 86, further comprising a second modem in communication with said first modem.

88. The device of claim 87, further comprising a router in communication with said first modem and said second modem.

89. The device of claim 87, wherein said second modem is in communication with a second power line.

90. A communications device for communicating data via a power line, comprising:

an inductor communicatively coupled to the power line to substantially prohibit the flow of data through the power line; and

an isolation device having a first conductor and a second conductor wherein said first conductor is coupled to the power line on a first side of said low pass filter, and wherein said second conductor is coupled to the power line on a second side of said low pass filter.

91. The device of claim 90, wherein said isolation device is a transformer.
